

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Atsushi WATANABE

Serial No. 10/692,801

Group Art Unit: 3652

Confirmation No. 1084

Filed: October 27, 2003

Examiner: Charles N. Greenhut

For: OBJECT CONVEYING SYSTEM AND CONVEYING METHOD

REPLY BRIEF UNDER 37 C.F.R. § 41.41

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Entry of this Reply Brief is respectfully requested. This Reply Brief is submitted in response to the Examiner's Answer, mailed January 23, 2008.

Serial No. 10/692,801

STATUS OF CLAIMS

Appealed claims 1-46 have been rejected and are on appeal.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-46 were rejected under 35 USC 112, second paragraph, as being indefinite. Specifically, claims 1, 2, 12, 13, 24, 25, 35 and 36 were held indefinite because of the phrase "container containing objects positioned therein from the first process." This ground of rejection is not addressed in the present Appeal.

Claims 1, 2, 12 and 13 were further held to be indefinite under 35 USC 112, second paragraph, because the Examiner has held that these claims include process steps in apparatus claims. This ground of rejection is addressed in the present Appeal and review is respectfully requested.

Claims 1-46 were rejected under 35 USC 102(b) as being anticipated by Nelson et al. (US 6,723,174). This ground of rejection is addressed in the present Appeal and review is respectfully requested.

ARGUMENT

In the Examiner's Answer, in the "Response to Argument" in section (10), the Examiner responded to the Appellants arguments in three subsections, labeled (1) – (3). The Appellants respectfully reply to each of the arguments in the subsections (1) – (3) below using the same numerology as the Examiner.

Subsection 1

In the Examiner answer, the Examiner noted that the Applicant was asserting that the phrase "articulated arm" has the same meaning as a phrase such as "an arm articulated by a joint of the type found in a human arm."

This statement is largely correct, given the ordinary and customary meaning of the phrase "arm" which is a part similar to a human arm. It therefore follows that any articulation in the arm would be a joint similar to a human arm. Therefore, it is respectfully submitted that the broadest reasonable interpretation of an "articulated arm" distinguishes over the engager actuator 912 in Nelson relied on by the Examiner, which only moves an engager plate 910 longitudinally.

Even the reference relied on by the Examiner, Nelson, distinguishes between the engager actuator 912, which only moves an engager plate 910 longitudinally, and an articulated arm. Specifically, an "articulated arm 974" is shown in Figure 34 of Nelson and performs an intermediate operation of moving a wafer 818 within the pod 815. Note that Nelson itself does not use the term articulated to describe the engager actuator 912.

Accordingly, it is still respectfully submitted that the term "articulated arm" in the independent claims of the present application patentably distinguishes over the engager actuator 912 relied on by the Examiner since the articulated arm is jointed in contrast to the engager actuator 912 which is only capable of moving the pod 815 in one direction from a back wall to a front wall. Figure 34 of Nelson, showing engager actuator 912, clearly does not show articulation.

Subsection 2

In the Examiner's Answer, the Examiner noted that he did not believe that the recited

feature of claims 6, 17, 29 and 40 of "when the object is taken out from the container, a signal indicating the number of objects taken out from the container or the number of objects remaining in the container is output to outside of the system" does not specifically recite the requirement of the provision of a numeric value. It is respectfully submitted that claims 6, 17, 29 and 40 recite "indicating the number of objects taken out from the container" and that this feature therefore clearly recites providing a number.

By contrast, as agreed to by the Examiner, Nelson only discusses a transmitter only capable of determining if one or more wafers are present in the cassette.

Although Nelson can determine if zero or one or more wafers is present, this feature does not indicate the number of wafers remaining in the cassette 88 and accordingly does not anticipate the feature of claims 6, 17, 29 and 40 of a signal indicating the number of objects taken out from the container. Specifically, even under the broadest reasonable interpretation, "zero or more than zero" is not a number of objects as recited in claims 6, 17, 29 and 40.

Subsection 3

In the Examiner's Answer, the Examiner noted that he believed that claims 1, 2, 12 and 13 do not comply with 35 USC 112, because the claims include process steps in apparatus claims. Specifically, the Examiner noted that the Applicants did not apply the principals of law discussed in the Appellant's Brief to the specific language in the claims objected to by the Examiner.

Using claim 1 as an example, claim 1 recites a conveying system for conveying objects from a first process to a second process. The conveying system includes a first robot having an articulated arm and hand, said hand holding and taking out a container containing objects positioned therein from the first process and conveying and positioning the held container using said arm to a predetermined position. Accordingly, it is clear that this is functional language reciting that the first robot must be capable of taking out a container containing objects positioned therein from the first process and conveying and positioning the held container using said arm to a predetermined position.

As previously noted, MPEP 2173.05(g) clearly discusses that: "A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by

its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971)."

The Examiner further suggests that clarification may be provided by inserting claim language such as "for holding." It is respectfully submitted that claims 1, 2, 12 and 13 already recite "holding and taking out a container" which is believed to be definite under 35 USC 112, second paragraph.

CONCLUSION

In summary, the Appellant submits that claims 1-46 patentably distinguish over the prior art and further that claims 1, 2, 12 and 13 do not improperly include process steps in apparatus claims. Reversal of the Examiner's rejections is respectfully requested.

Respectfully submitted,

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